

REVIEW SIMPLIFYING RADICALS: "The Buddy System"

1.  $\sqrt{27}$

2.  $\sqrt{180}$

SIMPLIFYING RADICALS WITH VARIABLES:

"The Buddy System" - The radical is a house, and variables only get to leave the house if they have a buddy!

$\sqrt{x^5}$

- 1) How many buddies (groups of 2) can be made? This many groups get to leave the house (exponent on the variable to the left)
- 2) Is there a variable left over? It is stuck inside the house!
- 3) Repeat for each different variable.

1.  $\sqrt{m^9}$

2.  $\sqrt{p^6}$

3.  $\sqrt{x^5y^7}$

4.  $\sqrt{a^6b^{15}}$

SIMPLIFYING RADICALS WITH NUMBERS AND VARIABLES:

1.  $\sqrt{45x^{11}}$

2.  $\sqrt{441w^4x}$

MIXED PRACTICE:

1.  $\sqrt{a^4}$

2.  $\sqrt{xy^2}$

3.  $\sqrt{x^5yz^3}$

4.  $\sqrt{125}$

5.  $\sqrt{24}$

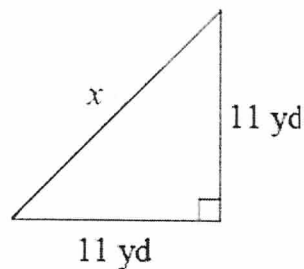
6.  $\sqrt{294}$

7.  $\sqrt{90n^2}$

8.  $\sqrt{72x^7}$

9.  $\sqrt{18x^3y}$

10.



11.

